SECRET

MONTHLY REPORT

25X1

[redacted]

PAR 202

3 May 65

SUBJECT: Briefing Print Enlarger

TASK/PROBLEM

1. To design and build a prototype enlarger for exposing high-quality briefing prints in formats up to and including 20 x 24 inches in size. Magnification to be in the 10 - 60 diameter range. The enlarger will be able to produce both black-and-white and color prints. Changing from one capability to the other should be made with a minimum of effort.

DISCUSSION

2. Effort has continued on design sketches and fabrication of the breadboard system which is to provide engineering data for this project and for PAR 224. The activity has been:

a. Main Frame: The lower frame unit was delivered by a subcontractor. The optical frame was scheduled for delivery by another subcontractor but was not received before the end of the month.

b. Vacuum Platen and Carriage: Some minor subassembly work was done on the carriage but further work must await delivery of and some assembly work on the main frame.

c. Objective Lenses: Fabrication of the mounts for all of the seven lens formula samples is about 95% complete. Glass elements are nearing completion for the 10.7 (3X to 5X) and 7.2 (5X to 9X) inch lenses. Elements for the remaining lenses are being fabricated.

d. Objective Focus Assemblies: Design effort is complete and detail sketches are about 95% complete. In the interest of cost saving for the breadboard system, only two of the "tensioned-thread" focus assemblies will be built for the breadboard tests. One assembly will be used for the 10.7 (3X to 5X) and the 7.2 (5X to 9X) inch lenses. The other assembly will be used for the two 1.25 (38X to 62X) inch lenses. A "general purpose" focus assembly, con-

trolled by a one-inch micrometer spindle will be used to test the 4.7 (8.5X to 15X), the 3.0 (14.5 to 24.7X) and the 1.9 (24.2X to 40.2X) inch lenses.

e. Lamphouse and Gate Assembly: The detail sketches of this assembly for the breadboard system are about 95% complete.

f. Negative Transport Model: Fabrication of the slatted "non-steering" roller model was completed but had not been installed for film tracking tests at the end of the month.

g. Enlarger Control System: All components have been purchased and are mechanically mounted on their various chassis ready for wiring.

PLANNED ACTIVITY

3. In the next month, it is expected that:

a. The optical frame will be received and will be assembled with the lower frame and the platen and carriage assembly.

b. All detail sketches of the lamphouse, the two tensioned-thread objective focus assemblies and of the general purpose focus assembly will be released for fabrication early in the month.

c. About half of the wiring of the control system will be completed.

d. Two of the lens formula sample objective lenses will be delivered.